

### **REMARKS**

Claims 1–32 are pending. Claims 1–16, 18, 22, 23, and 26–32 are currently cancelled. Reconsideration of the application is requested.

### **§ 103 Rejections**

Claims 17, 19–21, 24, and 25 are rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent Publication 2002/0036017 (hereinafter Leys) in view of U.S. Patent 6,880,808 (hereinafter McPeak).

The Patent Office asserts that Leys teaches the claimed process except using the claimed materials for the stem. The Patent Office asserts that McPeak teaches a valve body and housing molded from PEEK or PAEK. The Patent Office then concludes that these facts establish a prima facie case of obviousness for substituting PEEK for the PAEK as claimed. Applicants respectfully disagree that such a conclusion can be drawn.

The stopcock of McPeak is designed using gamma-radiation stable materials for the valve housing and valve stem. See Column 2, lines 29 to 31 of McPeak. McPeak goes on to note that while PEEK is an example of gamma stable materials, that, *inter alia*, PAEK may also be useful. While this may be the case for making stopcocks that must withstand gamma radiation, it does not amount to a teaching or even a suggestion that PEEK and PAEK might be interchangeable in all circumstances.

In contrast, present claim 17 relates to a method that, surprisingly, is capable of providing a valve stem that has enough mechanical and/or thermal stress resistance to withstand use as a metering valve (as opposed to a stopcock). See page 2, lines 11 to 30 of the Application. Such stresses may be imparted by the repeated lateral movement of these elements together as a single unit. In order to withstand such stresses, and in order to provide adequate chemical and/or mechanical bonding between the elongate stem element and the sealing element, the first material comprises a polymer selected from the group consisting of polyaryletherketones, thermotropic liquid crystalline polymers, polymethylpentene, polyphenylene sulfide and mixtures thereof.

The Patent Office points to nothing in the prior art that would indicate a reasonable expectation of success in co-molding an elongate stem element and a seal element as claimed in the method of claim 17, when the materials are other than those presently claimed. In fact, while

Leys indicates that what they refer to as the control rod **48** and the fluid control portion **46** may be overmolded, Leys is conspicuously silent about using PAEK for such a construction. McPeak, which fails to teach such overmolding, makes assertions that for gamma radiation stability, either PEEK or PAEK may be used. Thus, one of skill in the art, in light of both McPeak and Leys, may well conclude that while in circumstances not requiring overmolding of a second component either PEEK or PAEK may be used, that when a second component is co-molded with the first, the PEEK and not PAEK is appropriate. Surprisingly, the Applicants have found that PAEK, along with select other materials, are appropriate for use in the method as claimed.

The asserted equivalence acknowledged in the context of gamma radiation resistance in McPeak is simply not analogous to whether such a substitution would be reasonably expected to succeed in the presently claimed method.

The rejection of claim 17 under 35 USC § 103(a) as being unpatentable over Leys in view of McPeak has been overcome and should be withdrawn.

Claims 19–21, 24, and 25 each add additional features to claim 17. Claim 17 is patentable for the reasons given above. Thus, claims 19–21, 24, and 25 are likewise patentable.

In summary, the rejection of claims 17, 19–21, 24, and 25 under 35 USC § 103(a) as being unpatentable over Leys in view of McPeak has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application is requested.

Respectfully submitted,

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Date

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